photoionization, or thermal conductivity, equipped with a continuous recorder, for the outlet of the carbon bed.

(b) An owner or operator of an undertread cementing operation, sidewall cementing operation, green tire spraying operation where organic solvent-based sprays are used, or Michelin-B operation where a VOC recovery device other than a carbon adsorber is used to meet the performance requirements specified under §60.543(j)(6), shall provide to the Administrator information describing the operation of the control device and the process parameter(s) which would indicate proper operation and maintenance of the device. The Administrator may request further information and will specify appropriate monitoring procedures or requirements.

[52 FR 34874, Sept. 15, 1987, as amended at 65 FR 61765, Oct. 17, 2000]

§ 60.545 Recordkeeping requirements.

(a) Each owner or operator of an affected facility that uses a thermal incinerator shall maintain continuous records of the temperature of the gas stream in the combustion zone of the incinerator and records of all 3-hour periods of operation for which the average temperature of the gas stream in the combustion zone was more than 28 °C (50 °F) below the combustion zone temperature measured during the most recent determination of the destruction efficiency of the thermal incinerator that demonstrated that the affected facility was in compliance.

(b) Each owner or operator of an affected facility that uses a catalytic incinerator shall maintain continuous records of the temperature of the gas stream both upstream and downstream of the catalyst bed of the incinerator, records of all 3-hour periods of operation for which the average temperature measured before the catalyst bed is more than 28 °C (50 °F) below the gas stream temperature measured before the catalyst bed during the most recent determination of destruction efficiency of the catalytic incinerator that demonstrated that the affected facility was in compliance, and records of all 3hour periods for which the average temperature difference across the catalyst bed is less than 80 percent of the

temperature difference measured during the most recent determination of the destruction efficiency of the catalytic incinerator that demonstrated that the affected facility was in compliance.

(c) Each owner or operator of an undertread cementing operation, sidewall cementing operation, green tire spraying operation where organic solvent-based sprays are used, or Michelin-B operation that uses a carbon adsorber to meet the requirements specified under §60.543(j)(6) shall maintain continuous records of all 3-hour periods of operation during which the average VOC concentration level or reading of organics in the exhaust gases is more than 20 percent greater than the exhaust gas concentration level or reading measured by the organics monitoring device during the most recent determination of the recovery efficiency of the carbon adsorber that demonstrated that the affected facility was in compliance.

(d) Each owner or operator of an undertread cementing operation, sidewall cementing operation, green tires spraying operation where organic solvent-based sprays are used, Michelin-A operation, Michelin-B operation, or Michelin-C-automatic operation who seeks to comply with a specified VOC monthly usage limit shall maintain records of monthly VOC use and the number of days in each compliance period.

(e) Each owner or operator that is required to conduct monthly performance tests, as specified under §60.543(b)(1), shall maintain records of the results of all monthly tests.

(f) Each owner or operator of a tread end cementing operation and green tire spraying operation using water-based cements or sprays containing less than 1.0 percent by weight of VOC, as specified under §60.543(b)(4), shall maintain records of formulation data or the results of Method 24 analysis conducted to verify the VOC content of the spray.

[52 FR 34874, Sept. 15, 1987, as amended at 54 FR 38637, Sept. 19, 1989; 65 FR 61765, Oct. 17, 2000]

§ 60.546 Reporting requirements.

(a) Each owner or operator subject to the provisions of this subpart, at the

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time of notification of the anticipated initial startup of an affected facility pursuant to \$60.7(a)(2), shall provide a written report to the Administrator declaring for each undertread cementing operation, each sidewall cementing operation, each green tire spraying operation where organic solvent-based sprays are used, each Michelin-A operation, each Michelin-B operation, and each Michelin-C automatic operation the emission limit he intends to comply with and the compliance method (where \$60.543(j) is applicable) to be employed.

- (b) Each owner or operator subject to the provisions of this subpart, at the time of notification of the anticipated initial startup of an affected facility pursuant to §60.7(a)(2), shall specify the monthly schedule (each calendar month or a 4-4-5-week schedule) to be used in making compliance determinations
- (c) Each owner or operator subject to the provisions of this subpart shall report the results of all initial performance tests, as required under §60.8(a), and the results of the performance tests required under §60.543 (b)(2) and (b)(3). The following data shall be included in the report for each of the above performance tests:
- (1) For each affected facility for which the owner or operator seeks to comply with a VOC monthly usage limit specified under $\S 60.542(a)$: The monthly mass of VOC used (M_o) and the number of days in the compliance period (T_d) .
- (2) For each affected facility that seeks to comply with a VOC emission limit per tire or per bead specified under $\S60.542(a)$ without the use of a VOC emission reduction system: the mass of VOC used (M_o) , the number of tires cemented or sprayed (T_o) , the mass of VOC emitted per tire cemented or sprayed (N_o) , the number of beads cemeted (N_o) , and the mass of VOC emitted per bead cemented (N_b) .
- (3) For each affected facility that uses a VOC emission reduction system with a control device that destroys VOC (e.g., incinerator) to comply with a VOC emission limit per tire or per bead specified under $\S60.542(a)$: The mass of VOC used (M_o), the number of tires cemented or sprayed (T_o), the

mass of VOC emitted per tire cemented or sprayed (N), the number of beads cemented (B_o), the mass of VOC emitted per bead cemented (N_b), the mass of VOC used per tire cemented or sprayed (G), the mass of VOC per bead cemented (G_b), the emission control device efficiency (E_c), the capture system efficiency (F_c), the face velocity through each permanent opening for the capture system with the temporary openings closed, and the overall system emission reduction (R).

- (4) For each affected facility that uses a VOC emission reduction system with a control device that destroys VOC (e.g., incinerator) to comply with a percent emission reduction requirement specified under §60.542(a): The emission control device efficiency (E), the capture system efficiency (F_c), the face velocity through each permanent opening in the capture system with the temporary openings closed, and the overall system emission reduction (R).
- (5) For each affected facility that uses a carbon adsorber to comply with a VOC emission limit per tire or per bead specified under $\S 60.542(a)$: The mass of VOC used (M_o) , the number of tires cemented or sprayed (T_o) , the mass of VOC used per tire cemented or sprayed (G_b) , the number of beads cemented (G_b) , the mass of VOC used per bead (G_b) , the mass of VOC recovered (M_r) , the overall system emission reduction (R), the mass of VOC emitted per tire cemented or sprayed (N), and the mass of VOC emitted per bead cemented (N_b) .
- (6) For each affected facility that uses a VOC emission reduction system with a control device that recovers VOC (e.g., carbon adsorber) to comply with a percent emission reduction requirement specified under $\S60.542(a)$: The mass of VOC used (M_{p}) , the mass of VOC recovered (M_{r}) , and the overall system emission reduction (R).
- (7) For each affected facility that elects to comply with the alternate limit specified under $\S60.542a$: The mass of VOC used (M_o) , the number of tires processed (T_o) , and the mass of VOC emitted per tire processed (N).
- (d) Each owner or operator of an undertread cementing operation, sidewall cementing operation, green tire

spraying operation where organic solvent-based sprays are used, Michelin-B operation who seeks to comply with the requirements described under §60.543(j) shall include in the initial compliance report a statement specifying, in detail, how each of the equipment design and performance specifications has been met. The initial compliance report also shall include the following data: The emission control device efficiency (E), the face velocity through each permanent enclosure opening with all temporary enclosure openings closed, the total area of all permanent enclosure openings, the total area of all temporary enclosure openings, the maximum solvent use rate (kg/hr or lb/hr), the type(s) of VOC used, the lower explosive limit (LEL) for each VOC used, and the length of time each component is enclosed after application of cement or spray material.

- (e) Each owner or operator of an affected facility shall include the following data measured by the required monitoring device(s), as applicable, in the report for each performance test specified under paragraph (c) of this section.
- (1) The average combustion temperature measured at least every 15 minutes and averaged over the performance test period of incinerator destruction efficiency for each thermal incinerator.
- (2) The average temperature before and after the catalyst bed measured at least every 15 minutes and averaged over the performance test period of incinerator destruction efficiency for each catalytic incinerator.
- (3) The concentration level or reading indicated by the organics monitoring device at the outlet of the adsorber, measured at least every 15 minutes and averaged over the performance test period of carbon adsorber recovery efficiency while the vent stream is normally routed and constituted.
- (4) The appropriate data to be specified by the Administrator where a VOC recovery device other than a carbon adsorber is used.
- (f) Once every 6 months each owner or operator subject to the provisions of §60.545 shall report, as applicable:

- (1) Each monthly average VOC emission rate that exceeds the VOC emission limit per tire or per bead specified under §60.542(a), as applicable for the affected facility.
- (2) Each monthly average VOC use rate that exceeds the monthly VOC usage limit specified under §60.542(a), as applicable for the affected facility.
- (3) Each monthly average VOC emission reduction efficiency for a VOC recovery device (e.g., carbon adsorber) less than the percent efficiency limit specified under §60.542(a), as applicable for the affected facility.
- (4) Each 3-hour period of operation for which the average temperature of the gas stream in the combustion zone of a thermal incinerator, as measured by the temperature monitoring device, is more than 28 °C (50 °F) below the combustion zone temperature measured during the most recent determination of the destruction efficiency of the thermal incinerator that demonstrated that the affected facility was in compliance.
- (5) Each 3-hour period of operation for which the average temperature of the gas stream immediately before the catalyst bed of a catalytic incinerator, as measured by the temperature monitoring device, is more than 28 °C (50 °F) below the gas stream temperature measured before the catalyst bed during the most recent determination of the destruction efficiency of the catalyst incinerator that demonstrated that the affected facility was in compliance, and any 3-hour period for which the average temperature difference across the catalyst bed (i.e., the difference between the temperatures of the gas stream immediately before and after the catalyst bed), as measured by the temperature monitoring device, is less than 80 percent of the temperature difference measured during the most recent determination of the destruction efficiency of the catalytic incinerator that onstrated that the affected facility was in compliance.
- (6) Each 3-hour period of operation during which the average concentration level or reading of VOC's in the exhaust gases from a carbon adsorber is more than 20 percent greater than the exhaust gas concentration level or

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reading measured by the organics monitoring device during the most recent determination of the recovery efficiency of the carbon adsorber that demonstrated that the affected facility was in compliance.

- (g) The requirements for semiannual reports remain in force until and unless EPA, in delegating enforcement authority to a State under Section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected facilities within the State will be relieved of the obligation to comply with these requirements, provided that they comply with the requirements established by the State.
- (h) Each owner or operator of an affected facility who initially elected to be subject to the applicable percent emission reduction requirement specified under §60.542(a) and who later seeks to comply with the applicable total (uncontrolled) monthly VOC use limit specified under §60.542(a) and who has satisfied the provisions specified under §60.543(k) shall furnish the Administrator written notification no less than 30 days in advance of the date when he intends to be subject to the applicable VOC use limit instead of the applicable percent emission reduction requirement.
- (i) The owner or operator of each undertread cementing operation and each sidewall cementing operation who qualifies for the alternate provisions as described in §60.542a, shall furnish the Administrator written notification of the election no less than 60 days after September 19, 1989.
- (j) The owner or operator of each tread end cementing operation and each green tire spraying (inside and/or outside) operation using water-based sprays containing less than 1.0 percent, by weight, of VOC as described in $\S 60.543(b)(1)$ shall furnish the Administrator, within 60 days initially and annually thereafter, formulation data or Method 24 results to verify the VOC content of the water-based sprays in use. If the spray formulation changes before the end of the 12-month period, formulation data or Method 24 results to verify the VOC content of the spray

shall be reported within 30 days of the change.

[52 FR 34874, Sept. 15, 1987; 52 FR 37874, Oct. 9, 1987, as amended at 54 FR 38637, Sept. 19, 1989; 65 FR 61765, Oct. 17, 2000]

§ 60.547 Test methods and procedures.

- (a) The test methods in appendix A to this part, except as provided under §60.8(b), shall be used to determine compliance with §60.542(a) as follows:
- (1) Method 24 or formulation data for the determination of the VOC content of cements or green tire spray materials. In the event of dispute, Method 24 shall be the reference method. For Method 24, the cement or green tire spray sample shall be a 1-liter sample collected in a 1-liter container at a point where the sample will be representative of the material as applied in the affected facility.
- (2) Method 25 as the reference method for the determination of the VOC concentrations in each stack, both entering and leaving an emission control device. The owner or operator shall notify the Administrator at least 30 days in advance of any test by Method 25. For Method 25, the sampling time for each of three runs shall be at least 1 hour. Method 1 shall be used to select the sampling site, and the sampling point shall be the centroid of the duct or at a point no closer to the walls than 1.0 meter (3.3 feet). The minimum sample volume shall be 0.003 dry standard cubic meter (dscm) (0.11 dry standard cubic feet (dscf)) except that shorter sampling times or smaller volumes, when necessitated by process variables or other factors, may be approved by the Administrator.
- (3) Method 2, 2A, 2C, or 2D, as appropriate, as the reference method for determination of the flow rate of the stack gas. The measurement site shall be the same as for the Method 25 sampling. A velocity traverse shall be made once per run within the hour that the Method 25 sample is taken.
- (4) Method 4 for determination of stack gas moisture.
- (5) Method 25 or Method 25A for determination of the VOC concentration in a capture system prior to a control device when only a single VOC is present (see $\S60.543$ (f)(2)(iv)(G) and (f)(2)(iv)(H)). The owner or operator